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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,551	12/10/1999	LYNN Y. LIU	AIMN-01-006	2530

7590 12/24/2003

DONALD J. PAGEL
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586 N. FIRST STREET
SUITE 207
SAN JOSE,, CA 95112

EXAMINER

NGUYEN, NGA B

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/467,551

Applicant(s)

LIU ET AL.

Examiner

Nga B. Nguyen

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 12, 2003 has been entered.
2. Claims 21-42 are pending in this application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freese et al (hereinafter Freese), U.S. Patent No. 5,291,543.

Regarding to claim 21, Freese discloses a computer implemented method for settlement of charges of network connection services, comprising.

receiving, from a local service provider, accounting records of connection service usage of the local service provider's network, operated independently from a home service provider's network, by a user belonging to a home service provider, the user connecting from the local service provider's network (column 5, lines 25-65, the roam

clearing house 240 receives roam call detail records from the billing service provider 205 of the cellular carriers 202, 201);

collecting the accounting records for a period of time (column 5, lines 42-45, collecting the roam records on a weekly or bi-weekly basis);

generating a report of service usage for the period of time (column 5, lines 52-60, the roam clearing house generating a report service usage for weekly or bi-weekly); and

transmitting the report of service usage to the home service provider (column 5, lines 52-55, transmitting the report to the billing service providers).

Freese does not teach filtering the accounting records to remove erroneous data. However, filtering the records to remove erroneous data is well known in the art of manipulating the records in the database using the computer system. Therefore, it would have been obvious to modify Freese's to include the feature above for the purpose of removing erroneous data in the accounting records in order to generating billing information for the user.

Regarding to claims 22-25, Freese discloses generating a report of service usage for the period of time comprises: categorizing the accounting records by home service provider, by local provider, by user and aggregating the accounting records corresponding to the period of time (column 5, lines 52-56).

Regarding to claims 26-27, Freese does not disclose filtering the accounting records to remove erroneous data comprises: removing duplicate records; removing irrelevant data from the accounting records. However, removing duplicate records and irrelevant data from the accounting records is well known in the art of manipulating the

accounting records. Therefore, it would have been obvious to modify Freese's to include the feature above for the purpose of removing duplicate records and irrelevant data from the accounting records in order to generating billing information for the user.

Regarding to claims 28, 30, Freese discloses multiplying the time period the user was provided service by the local service provider by a rate corresponding to a rate negotiated by the user's home service provider; categorizing the time period the user was provided service by local service provider (column 5, lines 32-36)

Regarding to claim 29, Freese discloses categorizing the time the user was provided service by geographic location and multiplying the time in each geographic location by a rate corresponding to charges for service in each geographic location for the user's home service provider (column 5, lines 32-36).

Regarding to claims 31, 32, Freese discloses a central settlement server for settling charges for network connection services comprising:

a loader for receiving accounting records from a local service provider and placing the raw accounting records in a raw records database (column 5, lines 25-65, the roam clearing house 240 receives roam call detail records from the billing service provider 205 of the cellular carriers 202, 201);

a raw records database, coupled to the loader, for storing the raw accounting records (column 4, lines 55-68);

a roaming history database for storing the filtered accounting records (column 5, lines 52-66); and

a reporting module, coupled to the roaming history database, for generating reports from the filtered accounting records to be sent to a home service provider records (column 5, lines 52-66).

Freese does not teach a filter, coupled to the raw records database to generate filtered accounting records by removing erroneous data from the accounting records received by the loader. However, filtering the records to remove erroneous data is well known in the art of manipulating the records in the database using the computer system. Therefore, it would have been obvious to modify Freese's to include the feature above for the purpose of removing erroneous data in the accounting records in order to generating billing information for the user.

Regarding to claims 33, 36, Freese discloses wherein the reporting module further comprises: a rating means for adding service rate information to the accounting records (column 5, lines 32-36).

Regarding to claims 34, 37, Freese discloses the loader further comprises: a transformation means for arranging fields in the accounting records into a predetermined format (column 5, lines 52-53).

Regarding to claims 35, 38, Freese does not disclose the filter comprises: a means for removing duplicate records. Therefore, it would have been obvious to modify Freese's to include the feature above for the purpose of removing duplicate records and from the accounting records in order to generating billing information for the user.

Claims 39-42 are written in computer programming that parallel the limitations found in claims 21-23, 28 above, therefore are rejected by the same rationale.

Conclusion

5. Claims 21-42 are rejected.

6. The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure:

Hayes (US 5,732,127) discloses real-time network for distributed telecommunication accounting system.

Leung (US 5,913,160) discloses a method and system for updating a replicated database in foreign and home telecommunication network system.

Dennison et al (US 6,324,404) discloses a cellular telephone system has call management decisions mad based on the exact geographic location of the mobile unit.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is (703) 306-2901. The examiner can normally be reached on Monday-Thursday from 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on (703) 308-0505.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-1113.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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C/o Technology Center 3600

Washington, DC 20231

Or faxed to:

(703) 305-7687 (for formal communication intended for entry),

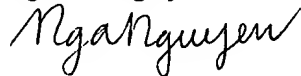
or

(703) 308-3691 (for informal or draft communication, please label

"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, Seventh Floor (Receptionist).

Nga B. Nguyen

A handwritten signature in cursive script that reads "Nga B. Nguyen".

December 15, 2003